

WHAT IS CLAIMED IS:

Sub A17

1 1. A computer-implemented method for remotely  
2 monitoring and dynamically changing the operation of a  
3 computer game executing on a first computer while the  
4 computer game is executing, the computer game comprising  
5 computer code, the method comprising the steps of:  
6 establishing a network connection between the first  
7 computer and a remote second computer;  
8 at the second computer, monitoring the operation of  
9 the computer game executing on the first computer while  
10 the computer game is executing;  
11 from the second computer, issuing a command to  
12 modify the computer code of the computer game while the  
13 computer game is executing;  
14 modifying the computer code of the computer game at  
15 the first computer; and  
16 at the first computer, continuing to execute the  
17 computer game in accordance with the modified computer  
18 code.

1 2. The method of claim 1 wherein the step of issuing a  
2 command to modify the computer code of the computer game  
3 while the computer game is executing comprises issuing a  
4 command to temporarily modify the computer code of the  
5 computer game while the computer game is executing.

1 3. The method of claim 1 wherein the step of issuing a  
2 command to modify the computer code of the computer game  
3 while the computer game is executing comprises issuing a  
4 command to permanently modify the computer code of the  
5 computer game while the computer game is executing.

1 4. The method of claim 1 further comprising the steps  
2 of:  
3 operating the computer game prior to establishing  
4 the network connection between the first computer and the  
5 remote second computer;  
6 storing, at the first computer, data relating to the  
7 operation of the computer game;  
8 after the network connection is established,  
9 uploading the data to the second computer; and  
10 analysing the data at the second computer to assist  
11 in determining how to modify the computer code of the  
12 computer game.

1 5. The method of claim 1 further comprising the steps  
2 of:  
3 maintaining a server routing list at the first  
4 computer;  
5 at the first computer, querying the computer game to  
6 determine a list of available data;  
7 at the first computer, collecting a sub-set of the  
8 available data from the computer game; and  
9 providing the sub-set of available data to the  
10 second computer.

1 6. The method of claim 1 wherein the step of issuing a  
2 command to modify the computer code of the computer game  
3 while the computer game is executing further comprises  
4 adjusting a resource value of the computer game.

1 7. The method of claim 1 wherein the step of issuing a  
2 command to modify the computer code of the computer game  
3 while the computer game is executing further comprises  
4 adjusting the amount of memory allocated to the computer

5 game.

1 8. The method of claim 1 wherein the step of issuing a  
2 command to modify the computer code of the computer game  
3 while the computer game is executing further comprises  
4 adjusting the amount of memory allocated to part of the  
5 computer game.

1 9. The method of claim 1 wherein the step of issuing a  
2 command to modify the computer code of the computer game  
3 while the computer game is executing further comprises  
4 changing an artificial intelligence module in the  
5 computer game.

1 10. The method of claim 1 further comprising the step of  
2 monitoring the operation of the computer game at the  
3 second computer after the modification has taken effect.

1 11. A computer-implemented method for remotely  
2 monitoring and dynamically changing the operation of an  
3 application program executing on a first computer while  
4 the application program is executing, the application  
5 program comprising computer code, the method comprising  
6 the steps of:  
7 establishing a network connection between the first  
8 computer and a remote second computer;  
9 at the second computer, monitoring the operation of  
10 the application program executing on the first computer  
11 while the application program is executing;  
12 from the second computer, issuing a command to  
13 modify the computer code of the application program while  
14 the application program is executing;  
15 modifying the computer code of the application

16 program at the first computer; and  
17 at the first computer, continuing to execute the  
18 application in accordance with the modified computer  
19 code.

1 12. The method of claim 11 wherein the step of issuing a  
2 command to modify the application program while executing  
3 comprises issuing a command to temporarily modify the  
4 computer code of the application while the application  
5 program is executing.

1 13. The method of claim 11 wherein the step of issuing a  
2 command to modify the computer code of the application  
3 program while the application program is executing  
4 comprises issuing a command to permanently modify the  
5 computer code of the application program while the  
6 application program is executing.

1 14. The method of claim 11 further comprising the steps  
2 of:  
3 operating the application program prior to  
4 establishing the network connection between the first  
5 computer and the remote second computer;  
6 storing, at the first computer, data relating to the  
7 operation of the application program;  
8 after the network connection is established,  
9 uploading the data to the second computer; and  
10 analysing the data at the second computer to assist  
11 in determining how to modify the computer code of the  
12 application program.

1 15. The method of claim 11 further comprising the steps  
2 of:

3           maintaining a server routing list at the first  
4   computer;  
5           at the first computer, querying the application  
6   program to determine a list of available data;  
7           at the first computer, collecting a sub-set of the  
8   available data from the application program; and  
9           providing the sub-set of available data to the  
10   second computer.

1   16. The method of claim 11 wherein the step of issuing a  
2   command to modify the computer code of the application  
3   program while the application program is executing  
4   further comprises adjusting the amount of memory  
5   allocated to part of the application program.

1   17. The method of claim 11 further comprising the step  
2   of monitoring the operation of the application program at  
3   the second computer after the modification has taken  
4   effect.

1   18. A computer-implemented system for remotely  
2   monitoring and dynamically changing the operation of an  
3   application program while the application program is  
4   executing, the application program comprising computer  
5   code, the system comprising:  
6           a first computer executing the application program;  
7           a second computer executing a monitoring program;  
8           a network connection between the first computer and  
9   the second computer;  
10           means, located at the second computer, for  
11   monitoring the operation of the application program  
12   executing on the first computer while the application  
13   program is executing;

14 means for issuing a command to modify the computer  
15 code of the application program while the application  
16 program is executing;

17 means at the first computer for modifying the  
18 computer code of the application program; and

19 means, at the first computer, for continuing to  
20 execute the application in accordance with the modified  
21 computer code.

1 19. The system of claim 18 further comprising:

2 a routing list, located at the first computer; and  
3 collector means, located at the first computer.

1 20. A computer-implemented system for remotely  
2 monitoring and dynamically changing the operation of an  
3 application program while the application program is  
4 executing, the application program comprising computer  
5 code, the system comprising:

6 a first computer executing the application program;

7 a second computer executing a monitoring program;

8 a network connection between the first computer and  
9 the second computer;

10 a plurality of collectors, located at the first  
11 computer, each collector querying the application program  
12 to determine available data and obtaining available data  
13 from the application program;

14 a server program, located at the first computer, for  
15 providing data to a remote program;

16 a routing list, located at the first computer, for  
17 providing routing information to an appropriate client;

18 a plurality of consoles, located at the second  
19 computer, to provide an interface to allow a remote user  
20 to specify commands to observe and change the operation

21 of part of the application program; and  
22 a second routing list, located at the second  
23 computer, to route data provided by server program to a  
24 select one of the consoles.

1 21. A set of instructions residing in a storage medium,  
2 said set of instructions capable of being executed by a  
3 processor to implement a method for remotely monitoring  
4 and dynamically changing the operation of an application  
5 program executing on a first computer, the method  
6 comprising the steps of:  
7 establishing a network connection between the first  
8 computer and a remote second computer;  
9 at the second computer, monitoring the operation of  
10 the application program executing on the first computer  
11 while the application program is executing;  
12 from the second computer, issuing a command to  
13 modify the computer code of the application program while  
14 the application program is executing;  
15 modifying the computer code of the application  
16 program at the first computer; and  
17 at the first computer, continuing to execute the  
18 application in accordance with the modified computer  
19 code.